

Daily GLOWBUGS

Digest: V1 #61

via AB4EL Web Digests @ SunSITE

Purpose: building and operating vacuum tube-based QRP rigs

[AB4EL Ham Radio Homepage @ SunSITE](#)

%%%% GlowBugs %%%%% GlowBugs %%%%% GlowBugs %%%%% GlowBugs %%%%%

Subject: glowbugs V1 #61

glowbugs

Friday, June 20 1997

Volume 01 : Number 061

Date: Thu, 19 Jun 1997 07:37:34 -0400

From: Mike Warren <m_warren@compuserve.com>

Subject: FS: coil winding machine

Hi Guys and gal(s),

Ran across this on one of the Internet NewsGroups and
figured somebody on Glowbugs might be interested.
Sorry I didn't capture the gentleman's email address.

=

- -----Forwarded Message-----

=

Date: 6/18/97 2:33 PM

RE: coil winding machine

Have a Morris Coil Winding Machine. (Comes in a 6"x4"x4" box,
not to be confused with a two ton industrial machine <G>).
Can wind honeycomb, spider web and solenoid coils.
Mint condition and has instructions.

Make offer.

73/ Carter

248-478-4266 eves

313-983-8609 days

Date: Thu, 19 Jun 1997 06:20:35 -0700 (MST)

From: Jack Meadows <jackmead@getnet.com>

Subject: Re: hy 16 foey

Hi Leon,

Looks like you might have a good regen receiver there!
Care to share more info about the regen? A 3 tuber?
I've built two regens...a one tuber and a one transistor one,
and in both cases I was dissapointed in the sensitivity.
Commercial broadcast came in loud and clear, but ham stations
sounded weak.

Best regards,
Jack W7QQQ

On Wed, 18
Jun 1997,
Leon Wiltsey wrote:

> Hi Gang
>
> boy am I dissapointed, got a h16 that was advertised as working.
> just barely. On seven tonight when I finally fired it up. it was pretty
> quiet only some s american comm stuff. Fired up the regen I built
> and the cw was 5x9, hope it just needs some tubes, (those I can get)
> ken gorden is sending me the manual so will try an alignment. But its
> pretty sad when a 3 tube regen homebuilt whips the pants off in
> sensitivity on a comm superhet. So I guess until I can get some sensitivity
> out of my hy-16 I will be using my trusty regen. As I sit here typing this
> I can read faint cw from the hyl6 connected to a 40 m dipole. The regen
> is connected to a hank of wire running to my sig gen and the cw is just
> banging in. Oh well so much for rec advertised as working. it is but just!!!!
> will let you know just what it took to get some decent sens.
> THANK THE LORD FOR ALL YOU HAVE
>
> 68 yr old semidisabled senior
> (stroke got my balance & hand to eye coordination)
> ham agn as KF4RCL TECK+ (MUCH HAPPINESS)
> BUILD MOST OF MY STATION EQUIP
> SUB.BA & GB-- NO SOLID STATE
>
> Leon B Wiltsey (Lee)
> 4600 Lake Haven BLVD.
> Sebring, Fl. 33872
>
> SEBRING FL. WHERE THERE IS NO QRM
> FROM ANYTHING LOCAL
>
>

Date: Thu, 19 Jun 1997 08:30:29 -0600
From: mack@mails.imed.com (Ray Mack)
Subject: Re[2]: Advice on a pi-net

Bobbi:

The trick answer to your real question is that the solenoid coil

equation assumes an isolated coil with no extra coupling to anything. I suspect that your results on 160 are fairly close to what you expect, but that 80 and 40 are way off. The reason for this is that you are shorting those other turns!! This invalidates the equations. You will end up with significantly less inductance on 80 and 40 from what a coil with that number of turns alone would have due to the shorted coil effect. I am not aware of any formulas or even rules of thumb for this.

What kind of wire are you using? If I have some available, I can build a coil on a piece of PVC (ought to be close enough to the bakelite) and test the various configurations on the network analyser.

The answer to your other question is one, and I only know the answer because we got a new game last night with a related question: If a man and a half can eat a cake and a half in an hour and a half, how many men does it take to eat 60 cakes in an hour? (I think I remembered it correctly)

Ray Mack
WD5IFS
mack@mails.imed.com
Friendswood (Houston), TX

Reply Separator

Subject: Re: Advice on a pi-net

<snip>

On 160, L is 46t #18 AWG closewound on a 1-5/8" form (ribbed mica-filled Bakelite) and Cout max is 2050pF

On 80, all but 33t of L are shorted (from the low-Z end as usual) and Cout max is 850pF.

On 40, all but 17t of L are shorted (as above), and Cout max is still at 850pF; min is 350pF.

- --end of raw data--

<snip>

My numbers for Bob's coil work out to about 1.7X the ARRL values! It's hard to chalk that up to coil-form effects, it's a bit high for "Kentucky windage" and it implies a very high Zin or...? Figured it both by direct calculation and using a couple of Lightning Calculators, and the answer's within 5% (not bad, that cardboard slide rule--I have both the modern one and the old circular one). Mr. Dennison is no fool--I just can't figure what he's up to!

<snip>

--Bobbi

Date: Thu, 19 Jun 1997 12:13:21 -0400 (EDT)
From: leeboo@ct.net (Leon Wiltsey)
Subject: hw-16 fooey

Hi Gang boy BOY SCREWED UP ON THE REC NAME IN LAST POST (DUMB DUMB DUMB)

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SUB.BA & GB-- NO SOLID STATE

Leon B Wiltsey (Lee)
4600 Lake Haven BLVD.
Sebring, Fl. 33872

SEBRING FL. WHERE THERE IS NO QRM
FROM ANYTHING LOCAL

Date: Thu, 19 Jun 1997 12:00:41 -0600 (MDT)
From: **dfrancis@iex.net (Dexter Francis)**
Subject: **Re: glowbugs V1 #60**

Greetings all -

You may recieve an e-mail concerning a chain letter for Jessica Mydek, supposedly written by a Doctor Jean Linney, Phd. at University of South Carolina. I contacted Dr. Linney this morning by fax and she informed me that this letter scheme is a hoax and there is no Jessica Mydek.

Please do not forward the e-mail, if you recieve one, and notify the sender that it is a fraud.

Sorry for the waste of bandwidth.

- -df

* CWest Tube Sales - P.O.B. 22443 SLC, UT 84122 *
* http://www.usa.net/~dfrancis/CWest_Tube_Sales.html *
* e-mail to: tubes@usa.net *

Date: Thu, 19 Jun 97 16:46:12 EDT
From: **jkh@lexis-nexis.com (John Heck)**
Subject: **Bandbox Superhet**

Folks,
A blessing is a pretty fine thing but when one blessing turns into *two*, and they are both *radio* blessings, well, I've just got to crow a little! The other week a nice fellow on the antique radio group and I got together and the result was an

old(1927 or so) Crosley "Bandbox" radio delivered to my door for a very reasonable sum indeed, just postage actually. I'm in the process of restoring a Bandbox of my own, and this fellow had a parts rig which happened to have some of the parts I badly needed(hard to find, now a days.8^), and he was kind enough to give it to me, to help out. This is a very fine thing, to share your junkie with others, and I considered myself blessed. Now, the other night I'm sitting in front of the TV and I'm looking over some of my old QSTs while my XYL watches her shows, and wadda know but I find an article in the June,1930 issue called "The Bandbox Superhet". This article shows you how to use the parts from an old Crosley Bandbox to make a swell new SW super! It doesn't need any of the parts that I needed for my restoration, either. The Bandbox is a battery TRF set, metal cased, of medium quality, and was probably widely and cheaply available in 1930. The resulting super will also be a battery set but a jury rigged eliminator will take care of that easily. What a nice coincidence! I'll report my experiences when I get it done, sooner or later :^)

Regards,
John Heck, KC8ETS
1009 Donson Drive
Dayton, Ohio 45429
(937)865-7036(work)
jkh@lexis-nexis.com

Date: Thu, 19 Jun 1997 20:19:53 EDT
From: dwink@juno.com (Daniel C Winkler)
Subject: Re: Advice on a pi-net

Hi Bobbi and gang,

On Tue, 17 Jun 1997 21:58:31 -0500 (EST) "Roberta J. Barmore" wrote:

>...all one has to do is look at the ARRL's "cookbok" pi-net charts
>and scale accordingly. Wrong! Either I can't calculate the
>inductance of a coil, or Bob's pi-net inductor values are high
>by a bit more than 1.5X. Or he went for a different loaded Q
> (ARRL uses 12, which sounds about right).

Calculate your own networks! It's easy. The Handbook has all the formulas. Make a spreadsheet for yourself to calculate the stuff you need frequently. I made up one which calculates pi, L, T, and L-C-C filters. Then you can choose the cut-off frequency, the Q, and try a match for any given component.

I used the background feature to color all my variable cells a pastel blue, and the important outputs in yellow. I locked all but the variable cells, but I used the null set for my password (I just hit enter when it asked me to enter the password.) That way I don't accidentally write a variable into one of my formulas, but the password is easy to remember, even for me!

On my spreadsheet I also had a place to calculate series impedance of a parallel LC trap at xxx frequency, and a little further down I calculate the inductance of a coil using the standard formula (or the improved formula that appeared in QST a few years back- there's almost no difference!) Yet to be added is a section for calculating the inductance of torroid coils, or the turns needed.... you get the idea.

Make a spreadsheet. Not hard, very useful.

Dan Winkler N7IVR Seattle, WA

Date: Thu, 19 Jun 1997 22:24:27 -0500 (EST)
From: "Roberta J. Barmore" <rbarmore@indy.net>
Subject: 7060 tonight

Hi!

Well, I tried the ol' Jones with a 50R LPF tonight. Seems to keep it out of TV sets (good), but also out of SW receivers (BAD!).

Still worth it--once again, I heard W5FRS, with "CQ BA" about 0248 GMT. Very weak tonight, but there nevertheless. (Never heard him snag anybody, nor could the pipsqueak sigs from here on the Radio Ranch reach him--tch!) Rod, VA3RP, was popping up between 7060-7050 too, along with a VE3 named Guy from Montreal whose full call escapes me.

All the more reason to start in on the metal-cased pi-net job. Mixed answers on what Bob Dennison was up to with his, but oh well--I'm gonna wind the coil on a plug-in form so it'll be easier to mess with! (Immediate project is finishing up a 50R, two-meter reflectometer; much as I like pilot lamps as RF indicators, I'll be givin' 'em up for awhile, at least 'til the TVI is squelched. Got the hard part done already--just need to dust off a couple of 4" microammeters from the '57 RCA TV rig and hook 'em up to the sampler through suitable pots. An' gee, what a coincidence--the big meters just happen to have square-law 0-100% and VSWR scales! Who'd'a thunk. Sure hope they work).

So the present sked for returning to the luminiferous aether runs something like 1) finish SWR meter, 2) build modernistic transmittifier, (1st tests), 3) finish up the Z-match and 4) get the G5RV strung [center otta be 30' up, which may help some], (final testing). It'll be awhile.

73,
--Bobbi

Date: Fri, 20 Jun 1997 10:33:48 -0400 (EDT)
From: leeboo@ct.net (Leon Wiltsey)
Subject: Re:mail comes back

>To: ba
>From: leeboo@ct.net (Leon Wiltsey)
>Subject: Re:mail comes back
>Cc:
>Bcc:
>X-Attachments:
>
>Mr.Pinner
>
>my mail to you regarding tubes purchase
>keeps being returned with (user unnown error mesage)
>
t THANK THE LORD FOR ALL YOU HAVE

68 yr old semidisabled senior
(stroke got my balance & hand to eye coordination)
ham agn as KF4RCL TECK+ (MUCH HAPPINESS)
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End of glowbugs V1 #61

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Created by **Steve Modena, AB4EL**
Comments and suggestions to **modena@SunSITE.unc.edu**
